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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/524,719

02/15/2005

Oskar Pacher

PACHER-2

8384

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HENRY M FEIEREISEN, LLC  
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EXAMINER

YANG, JIE

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

04/25/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/524,719	<b>Applicant(s)</b> PACHER ET AL.	
	<b>Examiner</b> JIE YANG	<b>Art Unit</b> 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

Claims 1-10 are pending in application.

#### ***Priority***

Previous objection on the foreign priority benefit of the filing date of foreign application (DE10237446.5, Date: Aug. 16, 2002) is withdrawn in view of the translation of foreign priority documents 102 37 446 and 103 33 272. The foreign priority benefit of the filing date of foreign application (DE10237446.5, Date: Aug. 16, 2002) is approved.

#### ***Status of the Precious Rejection***

The previous rejection of claims 1-4, and 7-9 under 35 U.S.C. 103 (a) over Tento Masayuki et al (JP 11-302737, thereafter 'JP737) in view of Katagiri et al (US 6,544,356 B2, thereafter '356) and Bilgen et al (US 6,939,418, thereafter '418) is withdrawn in view of the applicant's remarks filled on 02/07/2008. However, upon further consideration, a new ground(s) of rejection is made based on a newly discovered reference.

The previous rejection of claims 5-6, and 10 under 35 U.S.C. 103 (a) over 'JP737 in view of '356 and '418 as applied in claims 1-4, 7-9 and further in view of Baba (JP 60-213246, thereafter 'JP246) is withdrawn in view of the applicant's remarks filled on 02/07/2008. However, upon further consideration, a new ground(s) of rejection is made based on a newly discovered reference.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koga et al (JP 2001-107195A, thereafter JP'195).

Regarding claims 1-3, JP'195 teaches a stainless steel excellent in corrosion resistance, which can be used for spring application (Abstract of JP'195). The comparisons of compositions between JP'195 and the instant invention are listed in following table. All the compositions disclosed by JP'195 (Abstract and paragraph [0008] to [0024] of machine translation of JP'195) overlap the composition of the instant invention, which is a prima facie case of obviousness. SEE MPEP 2144.05 I. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to select the claimed compositions of Cr, C, Si, Mn, Ni, Mo, Cu, N, Ti, Nb, V, and Fe from the composition disclosed by JP'195 because JP'195 discloses the same utility throughout the disclosed ranges.

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Element	From instant Claim 1 (in wt%)	JP'195 (in wt%)	Overlapping range (in wt%)
C	0.03-0.12	0-0.03	0.03
Cr	13-20	8.0-14.0	13-14
Si	0.2-0.9	0-1.0	0.2-0.9
Mn	0.3-1	0-1.0	0.3-1
Ni	0-0.5	0.1-1.0	0.1-0.5
Mo	0.1-2	0.1-1.0	0.1-1
Cu	0.05-1.0	0.1-1.0	0.1-1
N	0.02-0.5	0.13-0.4	0.13-0.4
Ti	0-0.01	Trace amount	0-trace amount
Nb	0.01-1.0	0.02-0.5	0.02-0.5
V	0.02-0.25	0.02-0.5	0.02-0.25
Fe	Balance	Balance	Balance

Regarding claims 7-9, the damping performance (Claims 7-8) and magnetic hardness (Claim 9) are specific properties of the alloy. Because JP'195 teaches the similar stainless steel as recited in the instant invention as discussed in the rejections for the claims 1-3, the specific properties, for example, damping performance (Claims 7-8) and magnetic hardness (Claim 9) would be inherently obtained. See MPEP2112 III&IV. Regarding the process limitation in the instant claims 7-9, JP'195 further teaches heating, cold forming and tempering operations as recited in the instant claims, for example, the 1020°C 1 hr heating condition ranges (paragraph [0032] of machine translation of JP'195) is within heating condition range of 0.5 to 60 min. at temperature of 900 to 1100°C as recited in the instant claim 7; 60% or more deformation (paragraph [0036] of

machine translation of JP'195) overlaps the over 65% deformation range as recited in the instant claim 8; the 300-300°C tempering temperature range (paragraph [0036] of machine translation of JP'195) is within the 200 to 380°C tempering temperature range as recited in the instant claim 9.

Regarding claim 4, coercive force and magnetic saturation are properties that are depended on alloy composition and heat treatment process. As discussed in the rejections for the claims 1-3 and 7-9, JP'195 teaches the similar stainless steel with the compositions ranges overlap the composition ranges of claimed alloy, and JP'195 teaches the similar heat treatment process as recited in the application's disclosing, the specific properties like coercive force and magnetic saturation would be inherently obtained. See MPEP 2112.III&IV.

Claims 5-6, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP'195 as applied in claims 1-4, 7-9 and further in view of Baba (JP 60-213246, thereafter JP'246).

Regard to claims 5-6, and 10, JP'195 does not explicitly state applying a thermosetting powder coating on a spring element. JP'246 teaches a thermosetting powder coating on leaf spring with thermally curing to enhance the heat resistance and

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the wear resistance (Abstract of JP'246) and the thickness of coating film from 0.01 to 1 mm (Page 216, 4<sup>th</sup> paragraph), more specifically, 0.1 mm film and curing at 200°C for 60 min. (example 1 of JP'246). Film thickness and curing temperature within the thickness and curing temperature range recited in the instant claims. It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply a thermosetting powder coating as demonstrated in JP'246 on the spring element of JP'195 in order to enhance the heat resistance and the wear resistance (Abstract of JP'246).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jie Yang whose telephone number is 571-2701884.

The examiner can normally be reached on IFP.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-2721244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Roy King/  
Supervisory Patent Examiner, Art  
Unit 1793

JY